

Connecting You to Your Future

What lessons have we all learnt over the last 2 years?

Lesson 1: Anyone over 30 can probably be described as a “technology immigrant”, whereas all you under-30’s are far more likely to be “technology natives”.

So what’s the difference? Well, the technology immigrant just doesn’t act as instinctively as the technology native when it comes to using his or her smartphone, but they do have one thing in common. We have all become addicted to data and are connecting compulsively at all hours of the day and night - the only difference is the extent of our addiction.

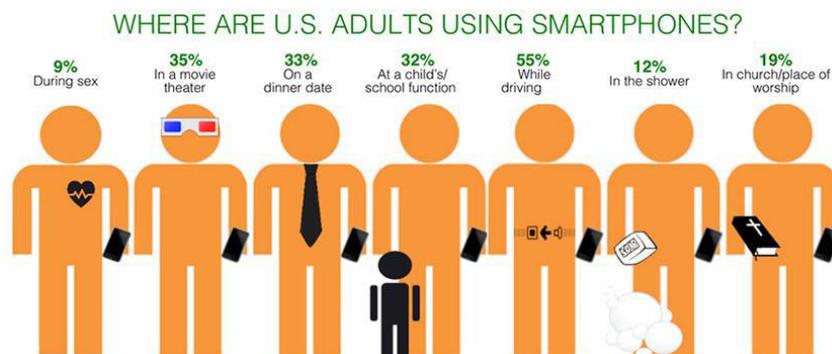
Lesson 2: Anyone under 20 is almost definitely a “screenager”. A “screenager” is defined as a young person who can watch the TV, operate a laptop on their knee and communicate using their smartphone, all simultaneously!

They can type at outrageous speeds without looking at the keyboard, take a selfie and upload the image to the world before you can say “don’t you dare tag me”! However, conventional reading, writing, grammar and spelling remain a challenge to most “screenagers”. Remember, these guys will run our future.

Lesson 3: Social behavior patterns are shifting, as people spend more and more time in the virtual world. Look at this typical example below...



When you see the following stats (particularly the one on the far left) it makes you quite worried about the future of civilization as we know it!



This could be more serious than global warming. Should we be worried, or should we all go with the flow?

We have to go with the flow, or rather the tsunami, as it's unstoppable.

So let's start with the basics and ask ourselves why, over the last two years, data connections underperform, particularly those on yachts.

The answer is simple – we are trying to do more and more with the same data connection we had last year.

Firstly, as we are all aware there are more people of all ages using data connections.

Secondly, connections appear slower due to more use of big data such as photos and video. Also in the old days, our Nokia phones never needed to run data-heavy app and iOS updates to keep them working. The Facebook you run today is a bigger and heavier beast than it was even just last year.

Also, never before did we have secret activities taking place between our phones and the iCloud, Photostream or Dropbox. In the old days a phone was only supposed to make a connection when we pressed the dial button! These days, even while we sleep, our smartphones are updating our Dropbox or our photo library without us being aware of it.

The reduction in performance is exaggerated even more on yachts due to the slower connection speeds available.

What can we do to improve the situation?

The knee jerk reaction is to blame the data connection. So much time is wasted by service providers proving this is not the case.

The second knee jerk reaction is to buy a bigger data connection. This will sort the problem, but money can easily be wasted for paying for data that you don't use. As we know, on yachts, data is not cheap and often spending more is not an option.

Any solution involves a number of factors. The first way we can help ourselves is by managing the distribution and use of data on-board, in the office and at home by installing a data monitoring and management system, such as our e3.ARMMS system. This means that we make sure key people and operations have priority access, and we restrict what activities are available or even within certain hours. With a plumbing system in our home or on-board we have a water meter measuring what we are consuming, we have a mains tap to switch off the water supply if we have a burst pipe and we also have control over the amount of water being used in a bath or sink by turning a tap on for fast or slow flow and off when no longer required. Why isn't even this basic scenario standard for data management?

Conversely, we also find people trying to get a gallon out of a pint pot. Such as an owner wanting to watch IPTV on a 512kbps data connection and getting upset as he was told the yacht had internet.

It's important to calculate the data needs to be able to select what the needs actually are, or limit the use to the size of the pipe available.

Why are satellite data connections so expensive and slow?

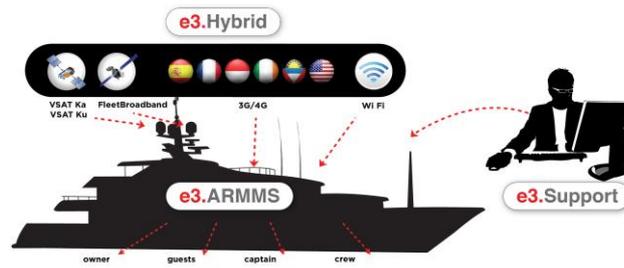
Internet via satellite costs the most for the slowest service. The higher cost is due to supply and demand. Satellites are expensive and the oceans are sparsely populated, so if you have to use satellite data, then you have to be realistic. Manage the use of the data efficiently by using a management system, but also keep an eye open for new services. The new Global Xpress (GX) service promises Dynamic Bandwidth Allocation (DBA). This is where you only pay for what you actually use rather than what you might use.

With the new 4G LTE and long range Wi-Fi services becoming widely available this summer, the focus can now be taken off the VSAT service as the primary communications connection for yachts.

Our recommendation is that VSAT is used as the background global service with a low bandwidth service, and then supplemented by these new cheaper and faster connections which are used for the heavy lifting such as downloading videos or video streaming.

How will new technology address this problem?

A managed hybrid solution provides the optimal service path between WiFi, 3G, 4G LTE and VSAT.



It's managed by a box that all the connections plug into, so that connections can be transferred automatically or manually. It can also control who on the yacht, down to device, including wearable device, can have access to bandwidth, for how long and for what. It then controls the efficient use of the data and switches data connections to faster and higher bandwidth when available. It makes sure the owner has protected bandwidth and provides security and virus protection.

So finally in conclusion we arrive at the final lesson:

Lesson 4: Just because something's always been done that way, doesn't mean it should continue to be done that way.

Technology evolves to fit new demands, which could lead me on to the new flat-panel satellite antennas from Kymeta and how they will change the face of the yachting industry..... another time!

